

***PHILIDRIS* (HYMENOPTERA: FORMICIDAE), A GENUS NEW TO CHINA, WITH DESCRIPTION OF A NEW SPECIES**

Shanyi Zhou

Department of Biology, Guangxi Normal University, Guilin 541004, China

Zhemín Zhēng

Institute of Zoology, Shaanxi Normal University, Xi'an 710062, China

(Received Mar. 28, 1997; accepted Sep. 22, 1997)

Abstract The genus *Philidris* Shattuck is recorded in China for the first time, and a new species i. e. *P. notiala* sp. nov. is described in the present paper.

Key words Hymenoptera, Formicidae, *Philidris*, new record genus, new species

INTRODUCTION

The genus *Philidris* was erected by Shattuck in 1992 based on the type species *P. cordata* (Smith) (= *Formica cordata* F. Smith 1859). This genus, which was divided out from *Iridomyrmex* Mayr, is one of the smallest genera in the subfamily Dolichoderinae, including 7 species and 7 subspecies or varieties (Bolton 1995), distributed over the Oriental Region and the Indo-Australian Region. There has not been species of the genus recorded in China up to date. When the authors study Guangxi's ant fauna, a new species of the genus is discovered, and the genus is recorded in China for the first time. The holotype is deposited in the Institute of Zoology, Shaanxi Normal University, Xi'an, and the paratypes are deposited in the Department of Biology, Guangxi Normal University, Guilin. The measurements and indices used in this paper are as defined by Holldobler and Wilson (1990). The measurements are expressed in millimeters and the indices are in percentage.

***Philidris* Shattuck** New record from China

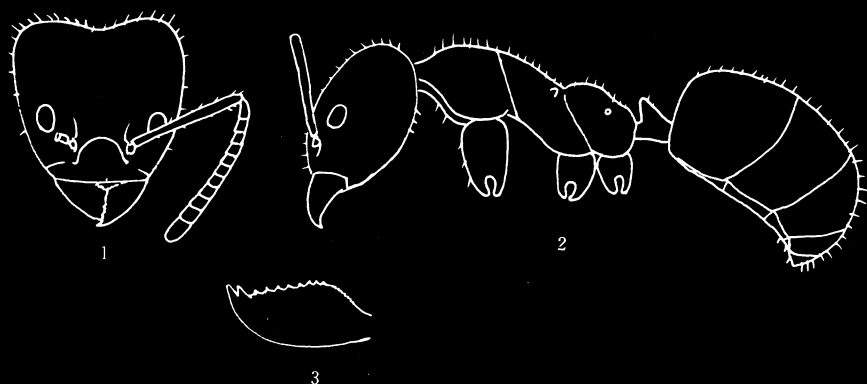
Philidris Shattuck, 1992. *J. Aust. Entomol. Soc.* 31: 17.

Worker. Polymorphic (less commonly monomorphic). Occipital border of head concave. Ocelli present in majors. Compound eyes placed relatively anterior on head. Anterolateral clypeal margin posterior to mediolateral region and separated by a shoulder. Anteromedial clypeal margin with central projection, either pointed or rounded (projection sometimes feeble). Palpal formula 6 : 4. Mandible with 10-12

teeth, 0-3 denticles; apical tooth slightly longer than subapical tooth; basal margin denticulate distally. Alitrunk elongate. Declivous face of propodeum convex; dorsal face convex, subequal in length to declivous face; propodeal angle indistinct. Meso-propodeal groove deeply impressed. Petiole scaliform, strongly inclined anteriorly and with anterior face much shorter than posterior face. Gaster oval.

Philidris notiala sp. nov. (Figs. 1-3)

Holotype worker: TL 3.8, HL 0.93, HW 0.92, CI 98, SL 0.75, SI 81, PW 0.56, AL 1.12, ED 0.18.



Figs. 1-3 *Philidris notiala* sp. nov. worker.

1. Head in frontal view; 2. body in profile view; 3. left mandible.

Head with mandibles heart-shaped, much broader posteriorly than in front, occipital border broadly concave. Mandible with 10 teeth, basal margin denticulate distally. Median portion of clypeus slightly convex, anterior clypeal margin straight, central projection feeble. Frontal area triangular, frontal carinae short, widely aparted, slightly diverged posteriorly. Antennal scape short, slightly extending beyond occipital corner of head. Eyes large, feebly convex; median ocellus indistinctly vestigial. Pro-mesonotum broad, forming a convexity, mesonotum obliqued backward; pro-mesonotal groove distinct, but not impressed; meso-propodeal groove impressed deeply; propodeum rounded, basal face convex, equal in length to declivous face. Petiolar node low, thick at base, rounded above, strongly inclined anteriorly. Gaster rather long, convex anteriorly but not overhang the petiolar node.

Shining throughout; feebly punctated on head, alitrunk, petiole and on gaster. Erect hairs long and soft, moderately dense on whole body; the longest hair on pronotum 0.25 mm. Pubescence fine and abundant.

Head, alitrunk and petiole brownish yellow; mandibles brownish red; antennae

and legs slightly lighter; gaster dark brown; pubescence yellow; pilosity brownish yellow.

Paratypes 5 workers: TL 3.1-4.0, HL 0.87-1.00, HW 0.83-1.10, CI 95-101, SL 0.86-0.75, SI 74-81, PW 0.55-0.60, AL 1.03-1.19, ED 0.17-0.22.

Holotype worker, Beiliu City, Guangxi Province of China, Aug. 26, 1995, collected by Wenming Shen. Paratypes 5 workers, data as holotype.

This new species resembles *P. cruda* (Smith), but differs from the latter in: anterior clypeal border straight; mandible with 10 teeth, followed by a row of distinct denticles on rounded basal margin distally; erect hair moderately dense, pubescence abundant.

Acknowledgements Many thanks to Professor Steven O. Shattuck (CSIRO, Division of Entomology, Australia) for his kindly sending us taxonomic papers; thanks also to Mr. Weming Shen (Guangxi Normal University) for collecting the specimens.

References

- Mann, W. M. 1921 The ants of Fiji Islands. *Bull. Mus. Comp. Zool.* **64**: 401-499.
- Shattuck, S. O. 1992a Review of the Dolichoderine ant genus *Iridomyrmex* Mayr with descriptions of three new genera (Hymenoptera: Formicidae). *J. Aust. Entomol. Soc.* **31**(1):13-18.
- Shattuck, S. O. 1992b Generic revision of the ant subfamily Dolichoderinae (Hymenoptera: Formicidae). *Sociobiology* **21**(1): 1-181.
- Smith, F. 1859 Catalogue of hymenopterous insects collected by Mr. A. R. Wallace at the Islands of Aru and Key. *J. Proc. Linn. Soc. Zool.* **3**: 132-158.
- Smith, F. 1860 Catalogue of hymenopterous insects collected by Mr. A. R. Wallace in the Islands of Bachian, Kaisaa, Amboyna, Gilolo, and at Dory in New Guinea. *J. Proc. Linn. Soc. Zool.* **5**: 93-143.

中国蚁科新纪录属及一新种记述 (膜翅目: 蚁科)

周善义 (广西师范大学生物系, 桂林 541004)

郑哲民 (陕西师范大学动物研究所, 西安 710062)

本文记述蚁科昆虫—中国新纪录属: 凹头臭蚁属 *Philidris* Shattuck 及该属一新种: 南方凹头臭蚁 *P. notiala* sp. nov.。新种与粗凹头臭蚁 *P. cruda* (Smith) 相似, 主要区别为: 唇基前缘平直; 上颚咀嚼缘具10齿, 其基缘远端具一系列清晰的细齿; 体具中等密度的直立毛和丰富的茸毛。

正模工蚁, 广西北流市, 1995年8月26日, 沈文铭采。副模5工蚁, 记载同正模。正模标本保存于陕西师范大学动物研究所, 副模标本保存于广西师范大学生物系。